

Clean Version of the Amended Specification Paragraphs

INTEGRATED EMI SHIELD UTILIZING A HYBRID EDGE

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Please replace the paragraph beginning on page 6, line 2, with the following:

FIG. 5 illustrates various views of an embodiment of chip carrier 530. FIG. 5A is a top view of one embodiment of a chip carrier. IC chip carriers 530 may incorporate a cavity 518 that holds integrated circuit chips or other circuits. FIG. 5C illustrates the chip carrier 530 cross-section showing the staircase-shaped steps 550 of cavity 518. Other cavities may not have this structure as is illustrated by a second cavity 519. As shown in FIG. 5A, patterned electrical conductors terminating in bonding pads 522 lie on the surfaces of the ceramic layers and on the steps 550 of cavity 518. The bonding pads 522 on the cavity steps 550 are connected to an integrated circuit (not shown) through either bonding pads or individual wire leads on the IC to carry signals to and from the chip.

Please replace the paragraph beginning on page 6, line 12, with the following:

FIG. 5B shows an edge view of an embodiment of chip carrier 530 having portions of an electrically conductive layer, in this case a hybrid horizontal ground plane (HHGP) 524, exposed on the edge of the chip carrier 530. Portions of the HHGP 524 may be exposed as an engineered feature of the unit, or as a consequence of having sawed through portions of the HHGP 524 during the sawing process.

FIG. 7 illustrates a cross section of an embodiment of a chip carrier 730 incorporating an integrated hybrid edge EMI shield 726. The chip carrier 730 incorporates conduction paths 728 to allow electrical communication of the IC 740 to an external device, such as a circuit board (not shown). The IC 740 is in electrical communication with the conduction paths 728 through either wire bonding leads 742 or conduction pads on the IC 740 itself (not shown). The integrated hybrid edge EMI shield 726 is electrically connected with the integrated hybrid horizontal ground plane 724, both of which may act as an EMI shield. This embodiment provides an EMI shield that shields circuitry that is internally mounted in cavities 718 and 719 from external EMI emissions directed towards the portion of the chip carrier edge incorporating the shield 726 and the chip carrier side incorporating the hybrid horizontal ground plane 724.